

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-20 (Cancelled)

21. (Currently Amended) An apparatus for an amputee who has a residual limb, comprising:

a flexible liner adapted to cover a portion of the residual limb;

only a single socket including an inner socket surface that defines a cavity sized and shaped to receive the liner and residual limb portion such that a space exists between and directly adjacent to both the inner socket surface and the liner when received in the cavity; and

a vacuum source including a pump attached to the apparatus and a vacuum tube attached at one end to the pump and at the other end to a vacuum valve disposed on the socket such that the vacuum source is in continuous fluid communication with the space between the liner and the inner socket surface when the liner and residual limb portion are received in the cavity;

wherein the apparatus includes no tubing for insertion between the liner and the residual limb for removing air at an interface between the liner and the residual limb, and wherein the flexible liner comprises a non-porous material.

22. (Previously Presented) The apparatus of claim 21, wherein the socket is substantially rigid.

23. (Previously Presented) The apparatus of claim 21, wherein the socket has a limb opening through which the residual limb may pass and has a vacuum opening through which the vacuum source and the cavity fluidly communicate.
24. (Canceled)
25. (Canceled)
26. (Previously Presented) The apparatus of claim 21, wherein the vacuum source is configured to evacuate air from the cavity to draw the limb toward the socket.
27. (Previously Presented) The apparatus of claim 21, wherein the vacuum source comprises a mechanical pump.
28. (Previously Presented) The apparatus of claims 21, wherein the vacuum source comprises a motor-driven pump.
29. (Currently Amended) The apparatus of claim 28, further comprising a power source attached to the apparatus, wherein power source is connected to the motor-driven pump.
30. (Previously Presented) The apparatus of claim 29, wherein the power source comprises a battery.
31. (Previously Presented) The apparatus of claim 29, further comprising a regulator attached to the apparatus, the regulator being configured to control the vacuum source to maintain the vacuum in the space when the apparatus is in use.
32. (Currently Amended) The apparatus of claim ~~31~~ 29, ~~further comprising a~~ wherein the regulator is connected to a the power source ~~for controlling the vacuum source.~~
33. (Currently Amended) The apparatus of claim 21, further comprising a prosthetic limb member that includes one of a portion of a prosthetic leg or prosthetic arm, wherein the prosthetic limb member is connected to the socket and wherein the pump is attached to the prosthetic limb member.

34. (Previously Presented) The apparatus of claim 21, further comprising a seal member adapted to be between the socket and the residual limb to reduce air leakage into the space.

35. (Currently Amended) An apparatus for an amputee who has a residual limb comprising:

a flexible liner adapted to cover a portion of the residual limb;

only a single socket including an inner socket surface that defines a cavity sized and shaped to receive the liner and residual limb portion such that a space exists between and directly adjacent to both the inner socket surface and the liner when received in the cavity;

a motor-driven vacuum pump attached to the apparatus, wherein the vacuum pump is in continuous fluid communication with the space when the liner and residual limb are received in the cavity;

a vacuum regulator configured to control the vacuum pump to regulate the application of a vacuum to the space when the apparatus is in use; and

a battery attached to the apparatus for powering the motor-driven vacuum pump;

wherein the apparatus includes no tubing for insertion between the liner and the residual limb for removing air at an interface between the liner and the residual limb, and wherein the flexible liner comprises a non-porous material adapted to cover the portion of the residual limb received in the cavity.

36. (Currently Amended) A method for securing a portion of the residual limb of an amputee to a prosthesis, comprising the steps of:

providing only a single prosthetic socket having an inner surface defining cavity, a flexible liner including a non-porous material, and a vacuum source;

inserting a portion of a residual limb into the flexible liner;

inserting the liner and residual limb into the cavity of the socket such that the non-porous material covers the portion of the limb inserted into the cavity, wherein a distal end of

the covered portion of the limb is relative to the inner surface of the cavity such that an air-filled space exists between and directly adjacent to both the liner and the inner surface of the cavity;

applying a vacuum to the air filled space using a motorized ~~the~~ vacuum source to force the residual limb and the socket together, wherein the vacuum source includes a vacuum tube attaching the vacuum source to the socket to remove air from the air filled space, but does not include; ~~and~~

~~not inserting~~ tubing between the residual limb and the flexible liner to remove air at an interface between the residual limb and the flexible liner; and

maintaining application of the vacuum to the air-filled space by the vacuum source in a range of 10 to 25 inches of mercury during use; and

automatically adjusting the vacuum applied to the air filled space when the prosthesis is in use.

37. (Canceled)

38. (Previously Presented) The method of claim 36, wherein the vacuum source comprises a motor-driven pump powered by the battery.

39. (Currently Amended) The apparatus ~~method~~ of claim 34 wherein the seal member is formed from the same non-porous material as the non-porous portion of the liner.

40. (Currently Amended) The apparatus ~~method~~ of claim 21 further comprising a porous sleeve disposed over an outer surface of the non-porous portion of the liner.

41. (New) the apparatus of claim 1 further comprising a porous sheath or liner disposed between the residual limb and the liner.